UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,045	01/10/2005	Atsushi Kudo	255291US90PCT	2143
22850 7590 05/08/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER	
			YOUNG, NATASHA E	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			1797	
			NOTIFICATION DATE	DELIVERY MODE
			05/08/2008	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

## Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/502,045	KUDO ET AL.		
Examiner	Art Unit		
NATASHA YOUNG	1797		

The MAILING DATE of this communication appears on the cover sheet with the correspondence address	
THE REPLY FILED 30 April 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.	
1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:	
a) The period for reply expiresmonths from the mailing date of the final rejection.	
b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).	1
Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  NOTICE OF APPEAL	
2. The Notice of Appeal was filed on 30 April 2008. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).  AMENDMENTS	
3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because	
(a) They raise new issues that would require further consideration and/or search (see NOTE below);	
(b) They raise the issue of new matter (see NOTE below);	
(c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or	
(d) They present additional claims without canceling a corresponding number of finally rejected claims.	
NOTE: <u>See Continuation Sheet</u> . (See 37 CFR 1.116 and 41.33(a)).	
4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).	
5. Applicant's reply has overcome the following rejection(s):	
6. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).	
7. Solving For purposes of appeal, the proposed amendment(s): a) solving will not be entered, or b) solving will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: 1-6,10-12,16,20 and 22-46. Claim(s) withdrawn from consideration:	
AFFIDAVIT OR OTHER EVIDENCE	
8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).	
9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).	
10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.	
REQUEST FOR RECONSIDERATION/OTHER	
11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet.</u>	
12. ☑ Note the attached Information <i>Disclosure Statement</i> (s). (PTO/SB/08) Paper No(s). <u>01/17/2008</u> 13. ☑ Other:	
Malter D. Griffin/	
/Walter D. Griffin/ Supervisory Patent Examiner, Art Unit 1797	
ouportion, atom Examinor, the other trot	

## Continuation of 3. NOTE:

The amendments of "an adhesive layer combining said columnar porous ceramic members wth one another and having a plurality of pores adjusting a thermal capacity per unit volume of said adhesive layer such that said thermal capacity per unit volume of said adhesive layer is lower than a thermal capacity per unit volume of the porous ceramic member" and "an coating material layer combining said columnar porous ceramic members with one another and having a plurality of pores adjusting a thermal capacity per unit volume of said coating material layer such that said thermal capacity per unit volume of said coating material layer is lower than a thermal capacity per unit volume of the porous ceramic member".

## Continuation of 11. NOTE:

Applicant's arguments filed April 30, 2008 have been fully considered but they are not persuasive.

Although the arguments are based on amendments to the claims that have not been entered, the examiner has responded to the arguments.

In response to the argument that neither Naruse et al nor EP '883 disclose or suggest the limitation of "an adhesive layer combining said columnar porous ceramic members with one another and having a plurality of pores adjusting a thermal capacity per unit volume of said adhesive layer such that said thermal capacity per unit volume of said adhesive layer is lower than a thermal capacity per unit volume of porous ceramic members", Naruse et al disclose a sealing member material (see Naruse et al column 3, line 60 through column 4, line 62), such as disclosed in the application (see Application No. 10/502045 page 17, line 15 through page 18, line 6) with the exception of the foaming agent.

EP '883 discloses that it is known to add a foaming agent to the bonding material (sealing member material) to form pores in the bonding material (see EP '883 page 3, lines 15-37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Naruse et al with the teachings of EP '883 to attain a desired coefficient of thermal expansion and the Young's modulus of the bonding material (see EP '883 page 3, lines 15-23).

The combined teachings of Naruse et al and EP '883 disclose an adhesive material with the inherent prosperities of the adhesive material claimed in claim 4.

The examiner believes the thermal expansion coefficient and their mathematical relationships in claims 1-3 are inherent properties of the adhesive, which is disclosed in the combined teachings of Naruse et al and EP '883.

The claim does not recite the limitation of "setting the thermal capacity per unit volume of an adhesive layer lower than the thermal capacity per unit volume of the porous ceramic members without compromising the mechanical strength of the filter as a whole", such that that limitation was not considered.

Claims 10 and 16 are rejected for the same reasoning as follows.

Regarding the coating material, EP '883 discloses a coating material layer (see page 3, lines 24-33).

EP '883 discloses the use of carbon powder and resin beads, which may be organic or inorganic (see page 3, lines 18-20).

Naruse et al discloses the honeycomb structures used as a heat exchanger (see column 10, line 16-33) and the organic only contributes 0.1-5.0 wt% (see column 4, lines 27-30), which would not contribute a large amount to the thermal coefficient of the adhesive.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Naruse et al with the teachings of EP '883 to prevent stress concentration upon the bonded portions and for thermal shock resistance (see Ito et al reference page 2, lines 52-54).

Because the combined teachings of Naruse et al and EP '883 disclose the materials of the coating material layer and the ceramic block of the claimed invention, Naruse et al and EP '883 also teach the limitation of the coating material layer having a thermal capacity per unit volume that is lower than the thermal capacity per unit volume of the porous ceramic members.